## Simplified Operations and Maintenance Specifications BASINS

What To Look For	What To Do
Structural Components, including inlets and	outlets/overflows, shall freely convey stormwater.
➤ Clogged inlets or outlets	Remove sediment and debris from catch basins, trench drains, curb inlets, and pipes to maintain at least 50% conveyance capacity at all times.
Cracked drain pipes or grates	Repair/seal cracks. Replace when repair is insufficient.
➢ Check dams	Maintain 4- to 10-inch-deep rock check dams at 12- to
71-	20-foot intervals.
Vegetation shall cover 90% of the facility.	
> Dead or strained vegetation	<ul> <li>Replant per original planting plan, or substitute from SWMM Appendix F.4 plant list.</li> </ul>
	Irrigate as needed. Mulch banks annually. DO NOT apply fertilizers, herbicides, or pesticides.
Tall grass and vegetation	Cut back grass and prune overgrowth 1-2 times a year.
> Weeds	Manually remove weeds. Remove all plant debris.
Growing/Filter Medium, including soil and g	gravels, shall sustain healthy plant cover and infiltrate within 48 hours.
> Gullies	<ul> <li>Fill, lightly compact, and install plant vegetation to disperse flow.</li> </ul>
> Erosion	<ul> <li>Replace splash blocks or inlet gravel/rock.</li> </ul>
➢ Slope slippage	<ul> <li>Stabilize 3:1 slopes/banks with plantings from SWMM</li> <li>Appendix F.4.</li> </ul>
Ponding	Rake, till, or amend to restore infiltration rate.

## Maintenance Schedule:

Summer. Make any structural repairs. Improve filter medium as needed. Clear drain. Irrigate as needed. Fall. Replant exposed soil and replace dead plants. Remove sediment and plant debris. Winter. Monitor infiltration/flow-through rates. Clear inlets and outlets/overflows to maintain conveyance. Spring. Remove sediment and plant debris. Replant exposed soil and replace dead plants. Mulch. All seasons. Weed as necessary.

Maintenance Records: Record date, description, and contractor (if applicable) for all structural repairs, landscape maintenance, and facility cleanout activities. Keep work orders and invoices on file and make available upon request of the City inspector.

Access: Maintain ingress/egress, including access roads, to design standards.

Infiltration/Flow Control: All facilities shall drain within 48 hours. Record time/date, weather, and site conditions when ponding occurs.

**Pollution Prevention:** All sites shall implement best management practices to prevent hazardous or solid wastes or excessive oil and sediment from contaminating stormwater. Contact Spill Prevention & Citizen Response at 503-823-7180 for immediate assistance responding to spills. Record time/date, weather, and site conditions if site activities contaminate stormwater.

**Vectors (Mosquitoes & Rodents):** Stormwater facilities shall not harbor mosquito larvae or rats that pose a threat to public health or that undermine the facility structure. Monitor standing water for small wiggling sticks perpendicular to the water's surface. Note holes/burrows in and around facilities. Call Multnomah County Vector Control at 503-988-3464 for immediate assistance to eradicate vectors. Record time/date, weather, and site conditions when vector activity observed.

## Simplified Operations and Maintenance Specifications DRYWELLS AND SOAKAGE TRENCHES

What To Look For	What To Do
Structural Components include pipes, manholes (storm chambers, and silt traps (soakage trenches).	drywells), and rock/sand reservoirs (soakage trenches),
<ul> <li>Clogged inlets, reservoirs, manholes, or silt traps</li> <li>Debris or garbage build up</li> <li>Cracked drain pipes or manholes</li> </ul>	<ul> <li>Clean gutters, rain drains, and silt traps twice a year.</li> <li>Clear piping to facility when blockage occurs.</li> <li>Repair/seal cracks. Replace when repair is insufficient.</li> </ul>
Vegetation includes surface cover and nearby plant	tings.
> Large shrubs and trees	Prevent large root systems from damaging subsurface structural components.
Filter Layer includes rock/gravel bed.	
➤ Ponding water	<ul> <li>Clear piping through facility when ponding occurs.</li> <li>Replace rock/sand reservoirs as necessary.</li> <li>Tilling of subgrade below reservoir may be necessary (for trenches) prior to backfill.</li> <li>May require decommissioning and replacement (for drywells or trenches).</li> </ul>

## Maintenance Schedule:

Summer. Make necessary structural repairs. Clean silt traps.

Fall. Clean gutters and rain drains.

Winter. Monitor infiltration rate.

Spring. Clean gutters and rain drains.

**Maintenance Records:** Record date, description, and contractor (if applicable) for all structural repairs, landscape maintenance, and facility cleanout activities. Keep work orders and invoices on file and make available upon request of the City inspector.

Access: Maintain ingress/egress to design standards.

**Infiltration/Flow Control:** All facilities shall drain within 48 hours. Record time/date, weather, and site conditions when ponding occurs.

**Pollution Prevention:** All sites shall implement best management practices to prevent hazardous or solid wastes or excessive oil and sediment from contaminating stormwater. Contact Spill Prevention & Citizen Response at 503-823-7180 for immediate assistance responding to spills. Record time/date, weather, and site conditions if site activities contaminate stormwater.

**Vectors (Mosquitoes & Rodents):** Stormwater facilities shall not harbor mosquito larvae or rats that pose a threat to public health or that undermine the facility structure. Monitor standing water for small wiggling sticks perpendicular to the water's surface. Note holes/burrows in and around facilities. Call Multnomah County Vector Control at 503-988-3464 for immediate assistance to eradicate vectors. Record time/date, weather, and site conditions when vector activity observed.